



Joint Legislative Transportation Oversight Committee

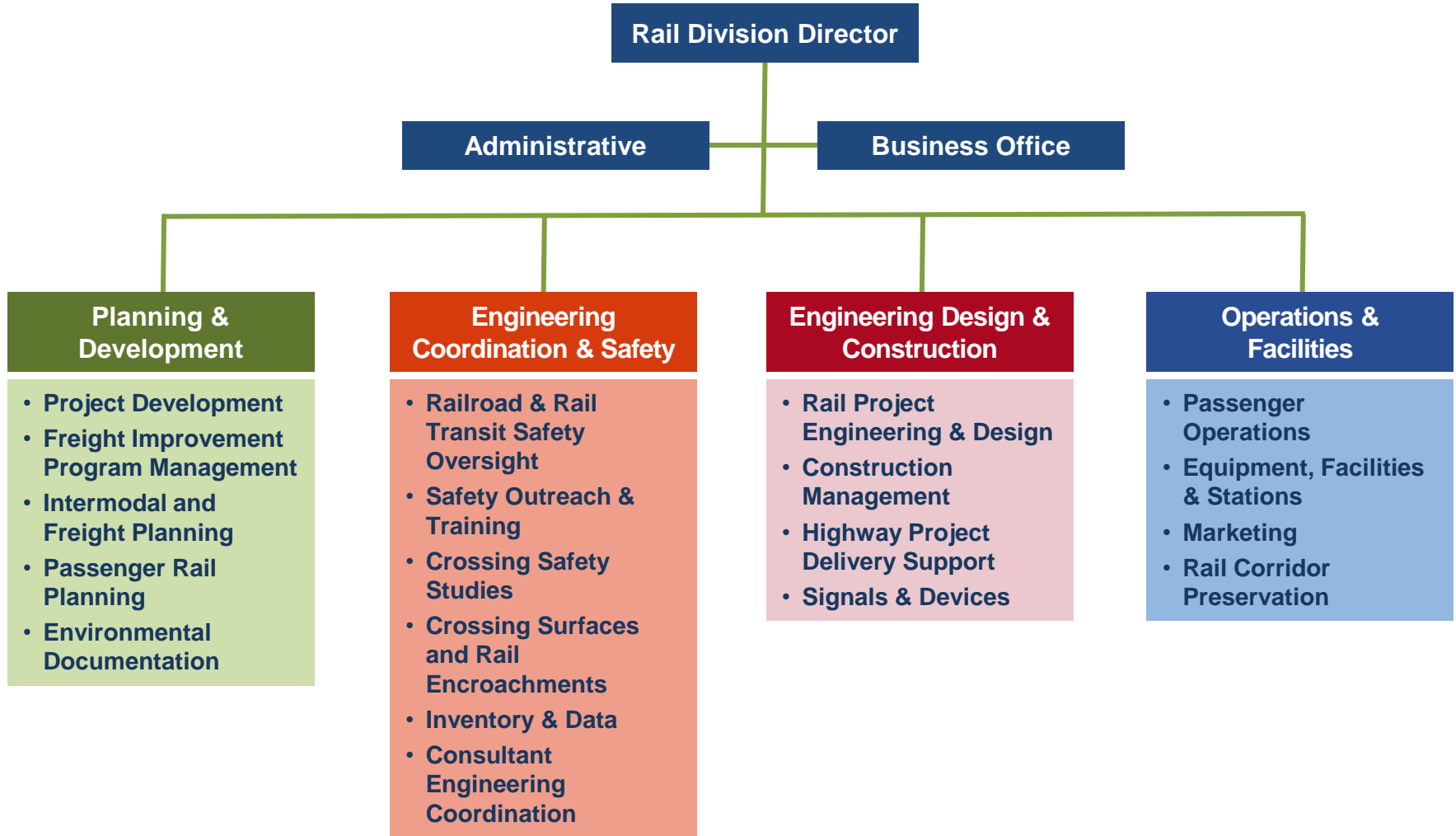
January 8, 2016

*NCDOT Rail Division*

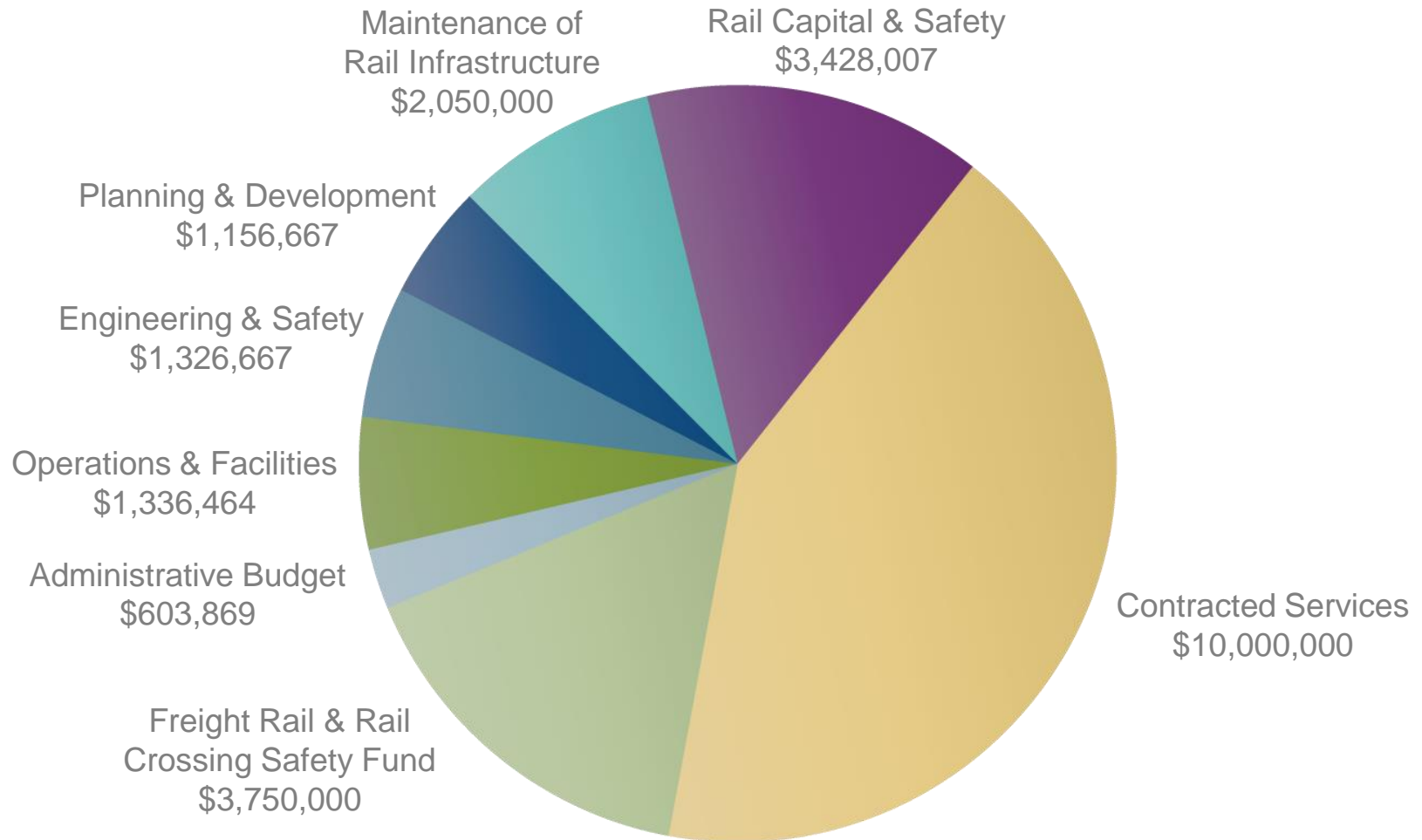
Paul Worley, NCDOT Rail Division Director



# *Rail Division*



## *Rail Division – State FY 2016 Funding – \$23,651,674*



# *Railroads Operate in 86 of 100 Counties*



**2**

Class I  
Railroads  
2,323 miles

**19**

Short Line  
Railroads  
956 miles

**14**

State-owned  
Corridors  
109 miles

**6**

Daily State  
Supported  
Trains

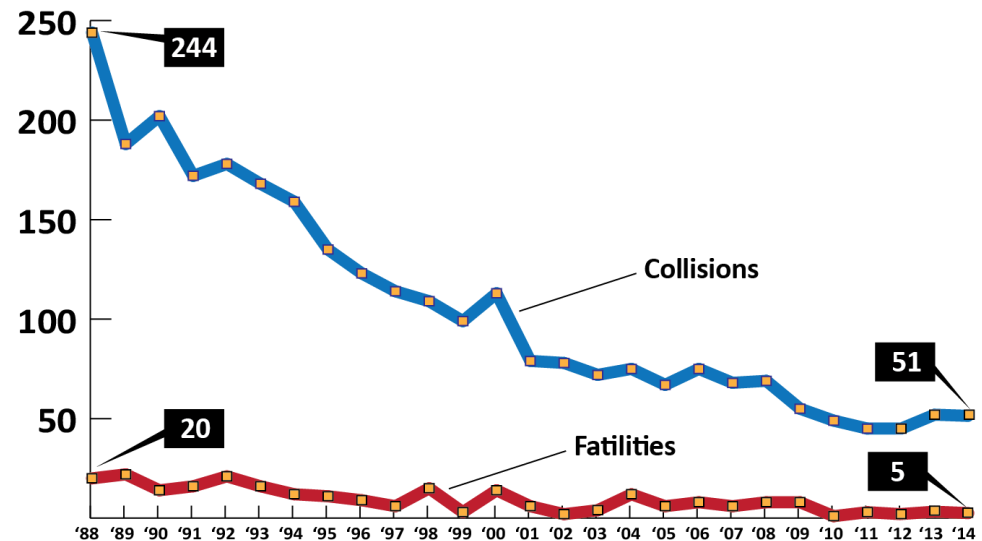
**8**

Daily Amtrak  
Thru-  
Trains

# *At-Grade Highway-Rail Crossings*

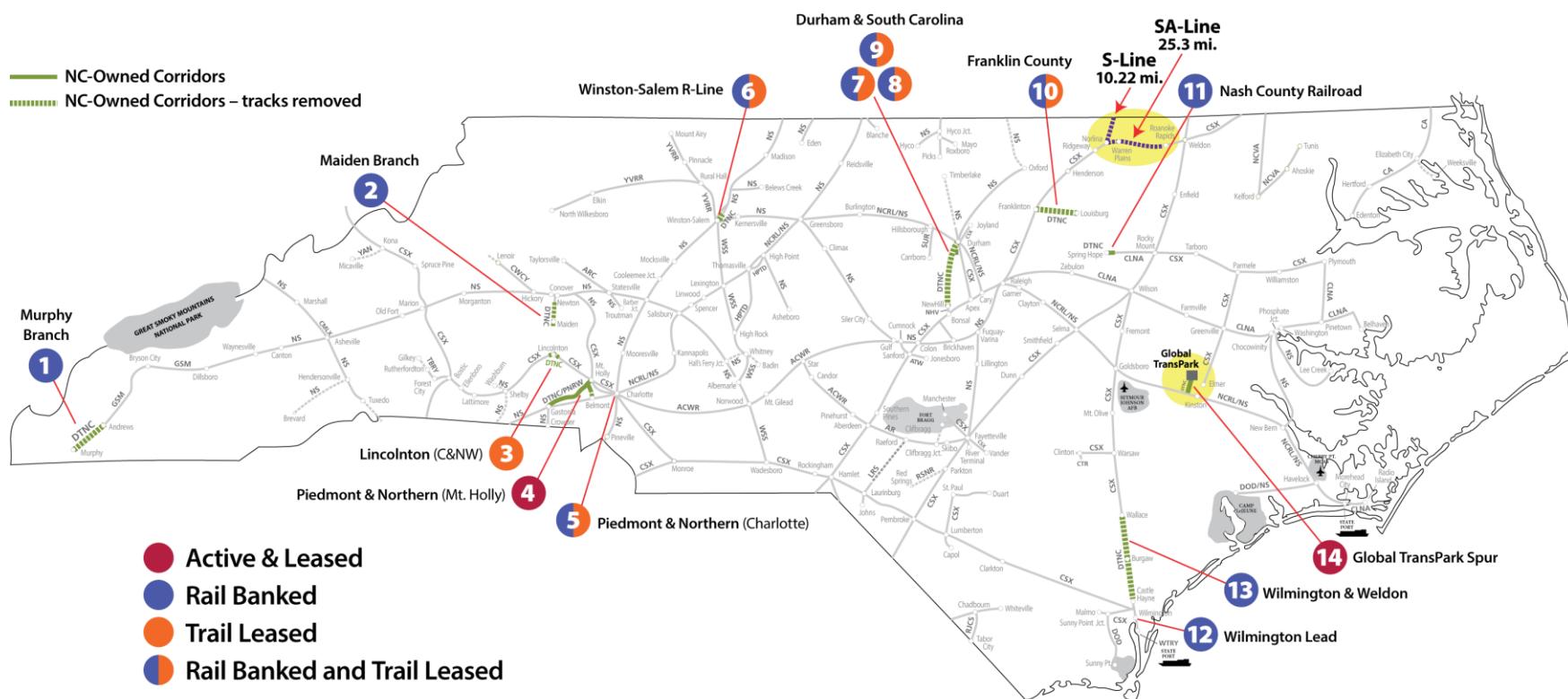
**Improvements to and elimination of at-grade highway-rail crossings have reduced train-car collisions and resulting fatalities**

- 60% of 4,025 public crossings have automatic warning devices
- Approximately 1,600 at-grade crossings remain unsignalized
- NCDOT continues to partner with railroads and others to improve or eliminate at-grade crossings
- Priority system based on FHWA-approved “Investigative Index” system
- No current funding for closing or improving private crossings



# Corridor Preservation

- New operator on GTP spur
- Proposed acquisition of S-Line and SA-Line
- Coordinate with local Economic Developers, RPOs and MPOs





# *Freight Connectivity Planning*

## **Eastern Intermodal**

- 25-Year Vision and 2015 Rail Plan identified need for better intermodal service and access to the Triangle and Eastern NC
- Would provide enhanced logistics to existing and prospective businesses in the Triangle and rural eastern NC

## **GTP to Port of Morehead City**

- SB-402 Eastern Infrastructure Improvement Study
- Feasibility Study Update

## **Access to Port of Wilmington**

- Near term – at-grade crossing consolidation and improvements
- Long term – Second Cape Fear River Bridge

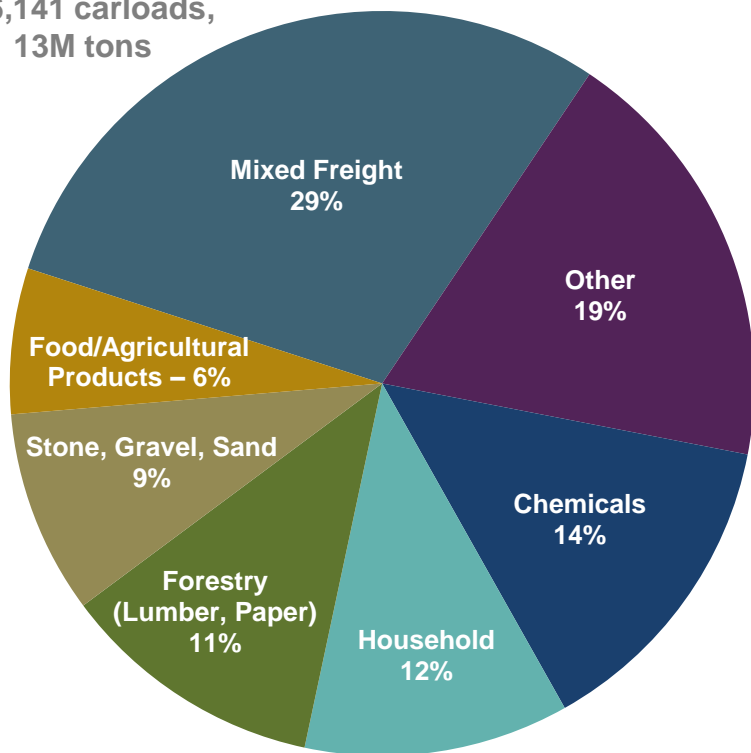


*Market and business justification enhances access to national markets.*

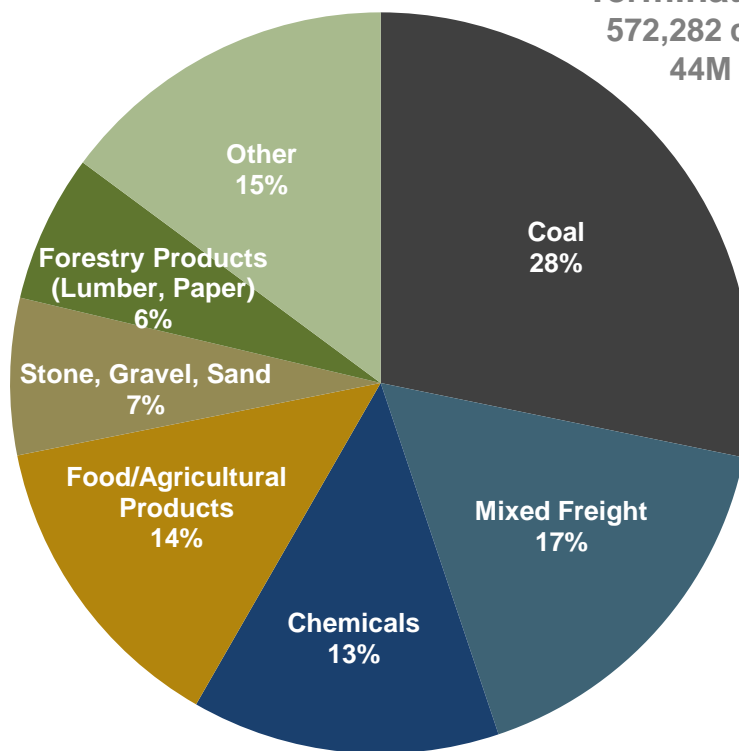
# Freight Rail Traffic

Source: Surface Transportation Board Waybill Sample

**Originated in NC**  
276,141 carloads,  
13M tons

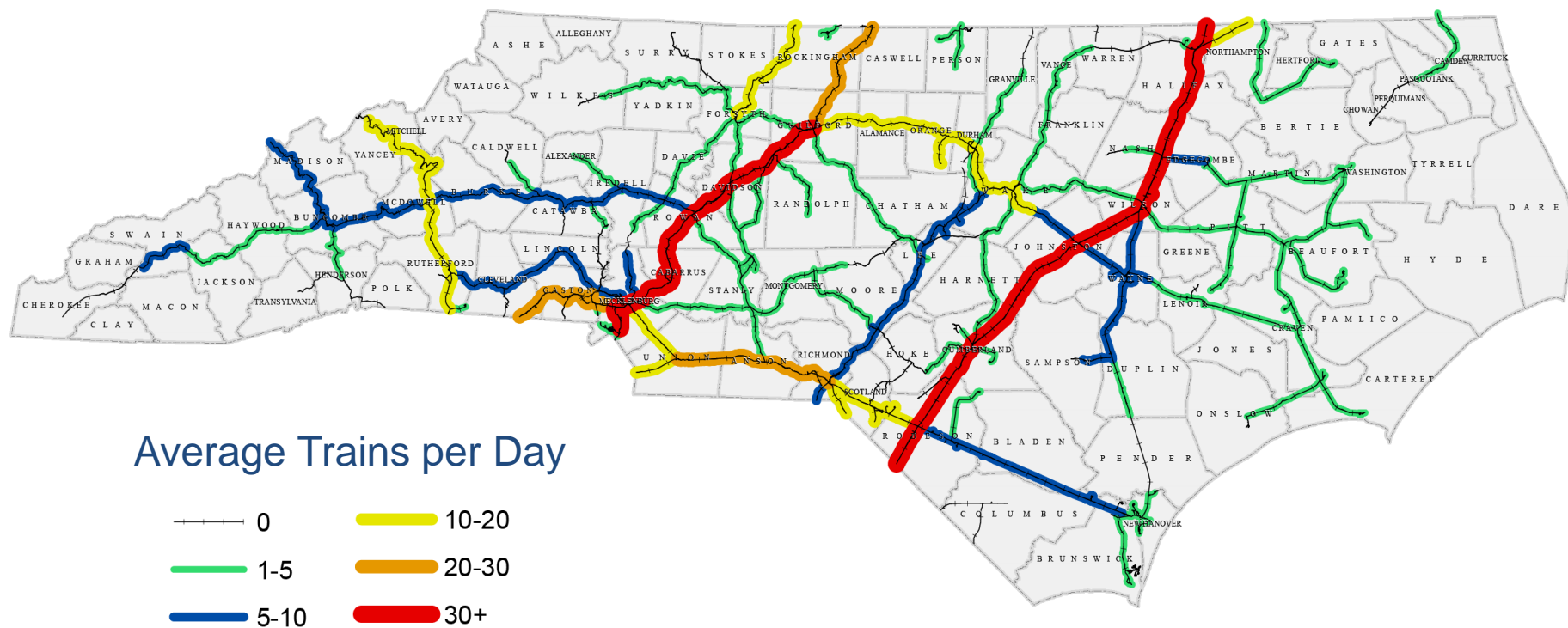


**Terminated in NC**  
572,282 carloads,  
44M tons





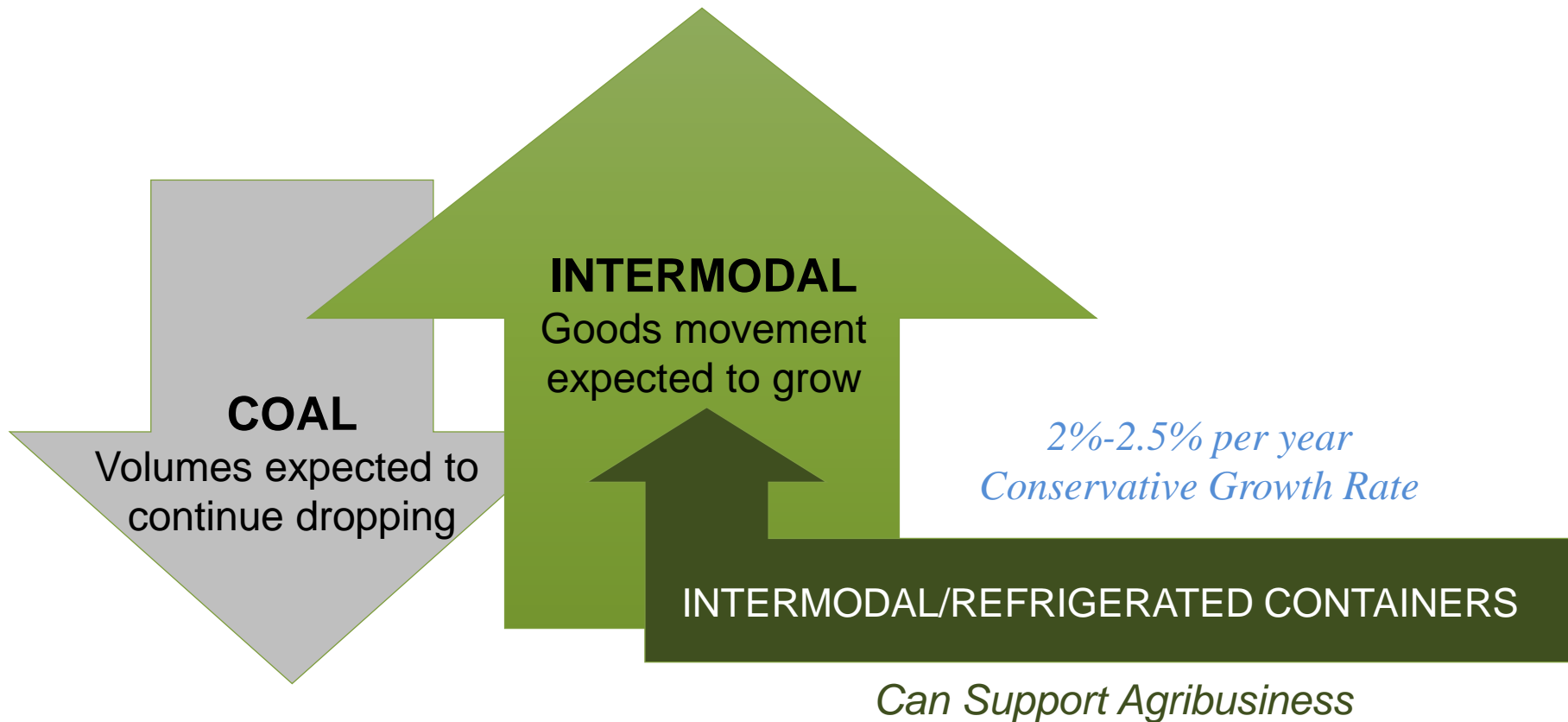
# 2015 Train Volumes in North Carolina



# *Rail Movement Trends*

Dominant freight volumes move north and south on Class I Railroads

Class I branch lines and short lines provide NC east-west access to the Class I system



# 2015 State Rail Plan Recommendations – Freight

- Safety improvements along Investment Tier corridors (heavy freight traffic and serving our ports)
- Capacity improvements at/near intermodal terminals
- Evaluate competitive intermodal service to Eastern NC and the Triangle, considering agriculture, cold storage and manufacturing
- Study major railroad improvements – Kinston to Morehead City; access to Wilmington
- Continue to seek partnerships for restoration of Wallace-Castle Hayne segment (Port of Wilmington)
- Serve emerging markets
- Preserve corridors – active and inactive



## *Freight Program – STI P3.0*

<b>Class I Projects and Needs – in 2016-2025 STIP (STI P3.0)</b>	<b>0-5 Years</b>	<b>BCA Ratio for Near Term Projects (Discounted at 3%)</b>
New Norfolk Southern TBT (Bulk Terminal) Facility in Charlotte	\$976,000	1.97
Container parking/storage adjacent to Norfolk Southern's Greensboro Intermodal Facility (converts former Roundhouse property)	\$1,695,000	13.11
CSXT – 10,000 foot siding extension at Stouts in Union County. Creates passing siding on segment of single track that benefits general freight and intermodal traffic	\$10,600,000	14.77
Upgrade NS rail line paralleling US 52 in Albemarle (Stanly County) to allow for freight	\$2,126,000	1.39
<b>Subtotal</b>	<b>\$15,397,000</b>	
<b>Funded by State</b>	<b>\$8,548,000</b>	
<b>Funded by CSXT</b>	<b>\$5,300,000</b>	
<b>Funded by NS</b>	<b>\$1,549,000</b>	
<b>Additional Near, Mid, and Long-term Class I freight rail projects: (2015-2040)*</b>	<b>\$1.1B</b>	

\*Includes projects such as track improvements/new access, intermodal and rail yard improvements, crossing safety and grade separations, corridor preservation and energy development support.

# *Benefits of Freight Rail Projects*

## **Benefit Cost Ratios represent the ratio of public benefits to costs**

- The discount rate is used to bring streams of benefits and costs over time to a common year
- Public benefits for freight project typically include:
  - Shipper savings – logistics cost savings to businesses and industries that ship goods
  - Safety benefits – the value of reducing the number and severity of accidents
  - Pavement maintenance costs avoided – the cost savings that result from reduced highway maintenance needs that can occur when truck traffic is diverted to rail
  - Congestion savings – the value of the time that a project can save users / travelers on the transportation system
  - Emissions savings – the value to the public of reducing emissions



# Short Line Freight Program – Identified Needs and Costs

*Based on 11 Short Line Survey Responses*

Short Line Projects and Needs <i>Eligible for Funding by FRRCSI</i>	Funding Needs By Time Period		
	0-5 Years	6-10 Years	11-20 Years
Bridges	\$54,000,000	\$3,000,000	\$22,000,000
Rail	\$5,000,000	\$11,000,000	\$28,000,000
Ties and Surfacing	\$14,000,000	\$14,000,000	\$30,000,000
Additional Capacity	\$16,000,000	\$5,000,000	\$1,000,000
Rail Yards	\$1,000,000	\$2,000,000	
Transloads	\$2,000,000	\$500,000	
Other Needs	\$3,000,000	\$34,000,000	\$2,000,000
<b>Total*</b>	<b>\$95,000,000</b>	<b>\$69,500,000</b>	<b>\$83,000,000</b>

\*Includes projects such as improvements of bridges and culverts, track structure, crossing surfaces, interchange points, rail yards and transfer facilities



# *Some Near-Term Approaches to Addressing Short Line and Class I Identified Needs*

## **Railroad Bridges**

*Many on light density lines need upgrading to 286K standards for today's railcars.*

*In 2010, approximately 53% of the regional and short line system in the US could accommodate 286k.*



## **Railroad/Highway Grade Separations**

*Class I needs identified in Rail Plan included 19 projects – at \$320M*

## **Support Freight Diversions to Rail**

*Providing access and additional rail capacity to existing industries*



# *Freight Rail & Rail Crossing Safety Improvement Fund*

Established 2013 under NCGS §124-5.1 and funded by annual NCRR cash dividends

**\$26.7M allocated to date:**

- \$19.2M SFY 2014\*
- \$3.75M SFY 2015
- \$3.75M SFY 2016

## **Program goals:**

- Make North Carolina's railroads safer
- Meet the needs of existing rail customers
- Address needs of prospective rail customers
- Build to meet the needs of future rail customers in small urban and rural areas



*\*Includes one-time first-year additional \$15.45M allocation*

# *FRRCSI Project Categories & Needs*

**Funds allocated statewide by NCDOT to projects based on:**

- Eligibility
- Needs
- Prioritization methodologies

## **Track & Infrastructure Improvements**

- Short Line Infrastructure Assistance
- Class I Infrastructure Projects
- Federal Grant Matching Funds

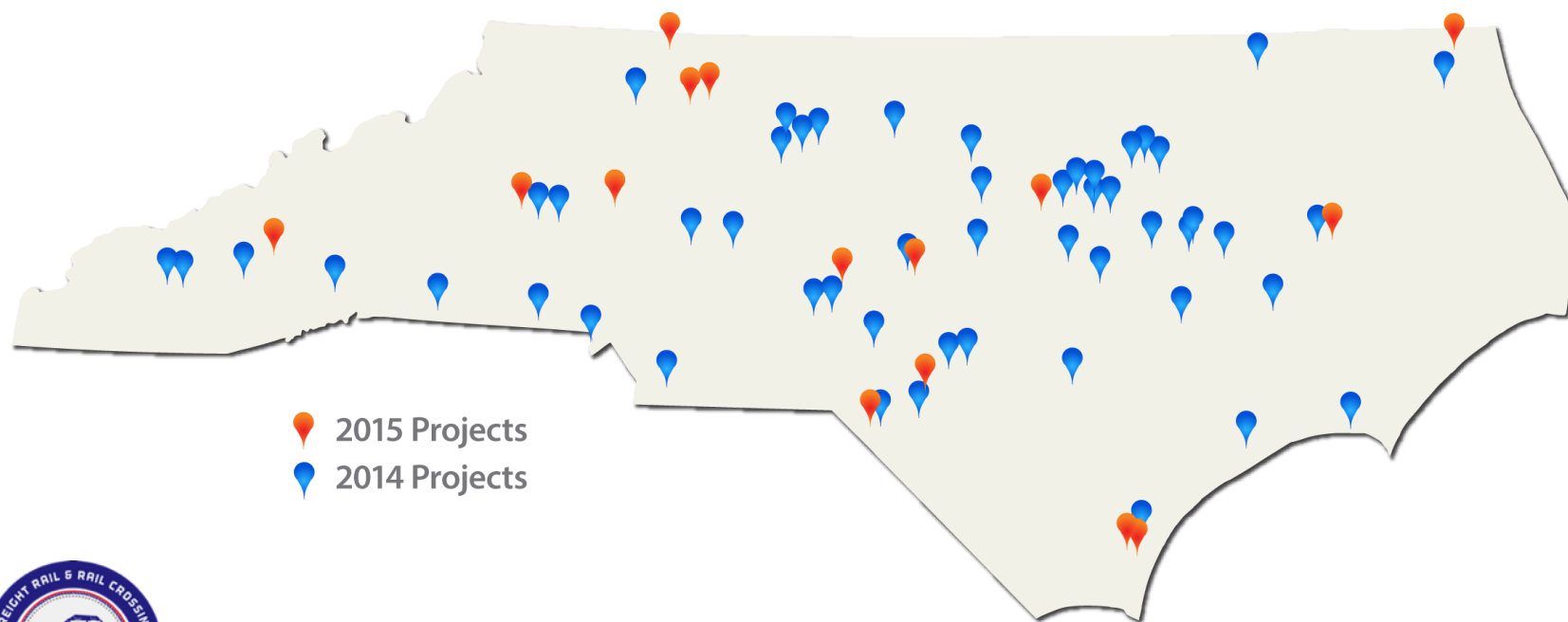
## **Grade Crossing Protection, Elimination & Signalization Improvements**

- Closures
- Corridors
- Signals
- Signage
- Surfaces

## **Rail Access Improvements**

- Discretionary Grant Matching Funds
- Rail Industrial Access
- Military
- Ports
- Industry

## *FRRCSI Projects – 2014-2015*



### Project Categories 2014-2015

	No. of Projects	FRRCSI Funding	Matching Funding	Total Funding
Track Infrastructure Improvements	24	7.0M	6.2M	13.2M
Crossing Safety & Signal Improvements	31	9.4M	0.1M	9.5M
Rail Access Improvements	25	6.5M	15.5M	22.0M
<b>Program Grand Total</b>	<b>80</b>	<b>22.9M</b>	<b>21.8M</b>	<b>44.7M</b>

# *State Grant Programs – FRRCSI Funded*

## **Short Line Infrastructure Assistance Program (SIAP)**

- Traditionally funded by annual state legislative allocation
- Previous annual allocations have ranged from \$0 to \$2 million
- FRRCSI is the source of funding in FY14 & FY15

## **Rail Industrial Access Program (RIAP)**

- Traditionally funded by annual state legislative allocation
- Previous annual allocations have ranged from \$119k to \$1 million
- Provides funds for construction of rail spurs to allow industries new or expanded rail access

- **Bringing jobs to people**
- **Diverting freight from highways to rail**



# *2015 Fixing America's Surface Transportation Act (FAST)*

## **Nationally Significant Freight and Highway Project Program**

- Grants of at least \$25 million
- Federal share cannot exceed 60%
- States / governmental entities
- Rail freight and intermodal
- Crossing and / or grade separations
- All project development phases eligible
- \$800 million nationally in 2016 Omnibus



## **Transportation Investment Generating Economic Recovery (TIGER)**

- \$500 million in 2016 Omnibus
- Coordinate funding between STI and TIGER

## **Section 130 Crossing Safety Funding**

- Slight increase in national set aside from \$220M to \$245M
- NC has typically received \$6.5M





*Questions?*

